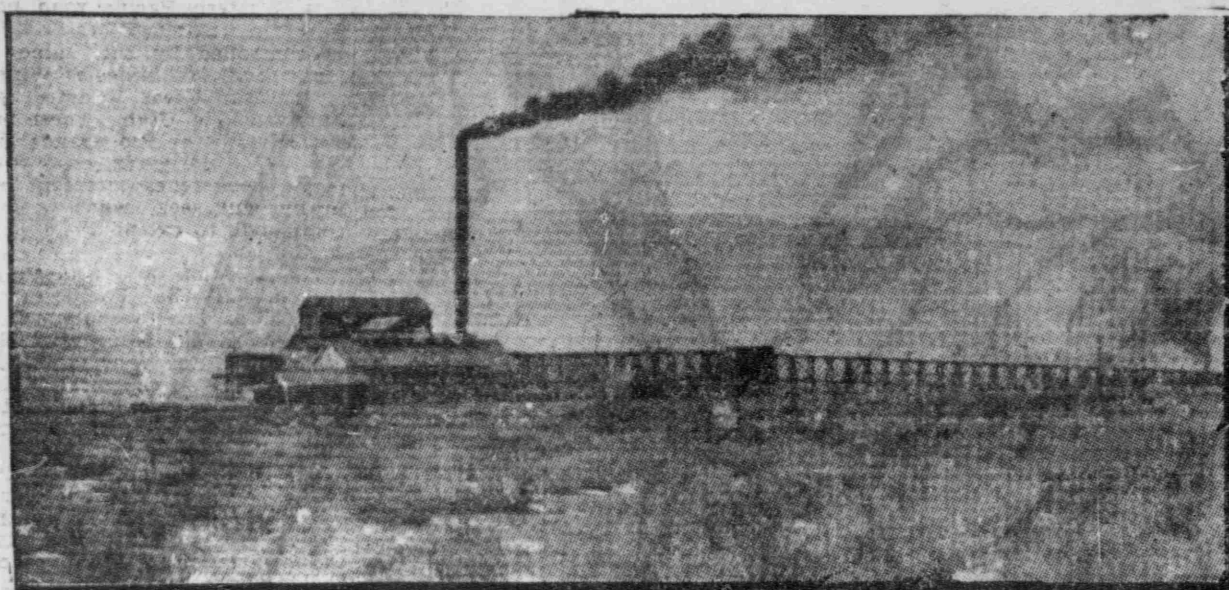


Big Development of the Cactus Mine



Newhouse Mill and Trestle Approach. View From the East.

Samuel Newhouse has been a prominent figure in Utah mining for the past ten years. He has been particularly successful in starting with the bare ground for a foundation, and independent of the element of luck, building enormous and profitable enterprises. The large bodies of copper sulphides were found in the Highland Boy mine at Bingham after he had predicted them. The smelter for their treatment, the first copper smelter of consequence in the state, was built on his advice.

Cactus in Beaver County.

The Cactus mine, in Beaver county, now the nucleus of the town of Newhouse, lay unprofitable for years after its values had been ascertained, its only mission, seemingly, being to disappoint the ambitious and wreck the fortunes of its successive unsuccessful promoters. Less than five years ago Mr. Newhouse obtained an option on this apparent Golgotha and commenced building successes where failures had held full sway. The enterprise is now rounded out. A plaza, oasis like, covered with bluegrass and flowers is the central figure in a community of homes. A railroad has been built to it across a country so barren that it was avoided by riders of the range. The hum of a colossal mill has been substituted for the howl of the coyote.

Brought Under Control.

A system of waterworks has been established into which water is brought by a pipe-line from the mountainside across the desert eight miles away. The stubborn old prospect, the Cactus with spines, has been subdued and forced to give up its riches. These are a part of his work in Utah only. He is only managing director of the erratic O. K. mine in Beaver county and other properties belonging to the Majestic company, and if they possess merit, he and his efficient staff will doubtless repeat the successes accomplished in other projects. Mr. Newhouse is also working in Canada, Montana, Idaho and Colorado, but this story is intended to deal more particularly of the Boston Consolidated and the Newhouse Mines & Smelter corporation which operates the Cactus mine and mill at Newhouse town.

The Boston Consolidated ground is a mine in a double sense of the word. There is an abundance of copper ore in vein matter carrying about 9 per cent of the red metal, and sometimes much greater values, accompanied with gold values characteristic of that camp.

This phase of the mine is worked by a series of five tunnels and from it there is being taken 300 tons of ore daily which is reduced in the smelter in the valley below. The means of transportation from the mine is the Copper Belt railroad. This output, it is said, can be increased to 750 tons of ore a day and the rate of production be maintained without overtaxing the capacity of the mine. The enormity of these bodies can best be realized when it is known that one of them has been opened for 100 feet and cross-cut eighty feet. But, without doubt, the greater and almost endless end of this proposition is the copper-bearing porphyries of which there is in extent a veritable empire of riches. These porphyries are a silicious rock shot full of minute particles of copper sulphides.

The development of these porphyries was not begun in real earnest until within the past year. In that time twelve tunnels with an aggregate length of about a mile and a half have been driven, the work still continuing, and the results have surpassed the most sanguine expectations.

Great Bodies of Ore.

Assays taken daily as the work has progressed for the past three months have shown 3 per cent copper from one part of the country, and the values taken from another part have ranged from 3 to 5 per cent. An encouraging feature is that the best values are found on the highest ground, giving from 500 to 700 feet vertical distance for mining above the level of the creek. These porphyries are to be concentrated, and for handling them arrangements have been made to erect a 5,000-ton daily capacity mill on a site already secured at the south end of the Great Salt Lake near the new town of Garfield, where the large copper smelters are being built. To provide means with which to erect this plant and complete the project bonds to the amount of \$1,250,000 are to be issued, redeemable in stock at \$40 a share. The bonds are now in demand at more than 100 per cent premium. The stock of the company, which sold at \$6 and \$7 a share, now brings about \$25 a share. The company is now completing an experimental concentrator plant on its grounds to try out the best methods for the reduction of this ore.

The porphyry mining is to be operated by the steam shovel system of which three have already been ordered. These shovels are conducive to speed and economy and one of them can handle twenty-four tons an hour. The development is still in progress with eight machine drills driven by air from the company's compressor.

Mr. Newhouse recently stated that the Boston Con. is capable of earning an 8 per cent annual dividend on the shares at a value of \$100 a share.

Prospects at the Cactus.

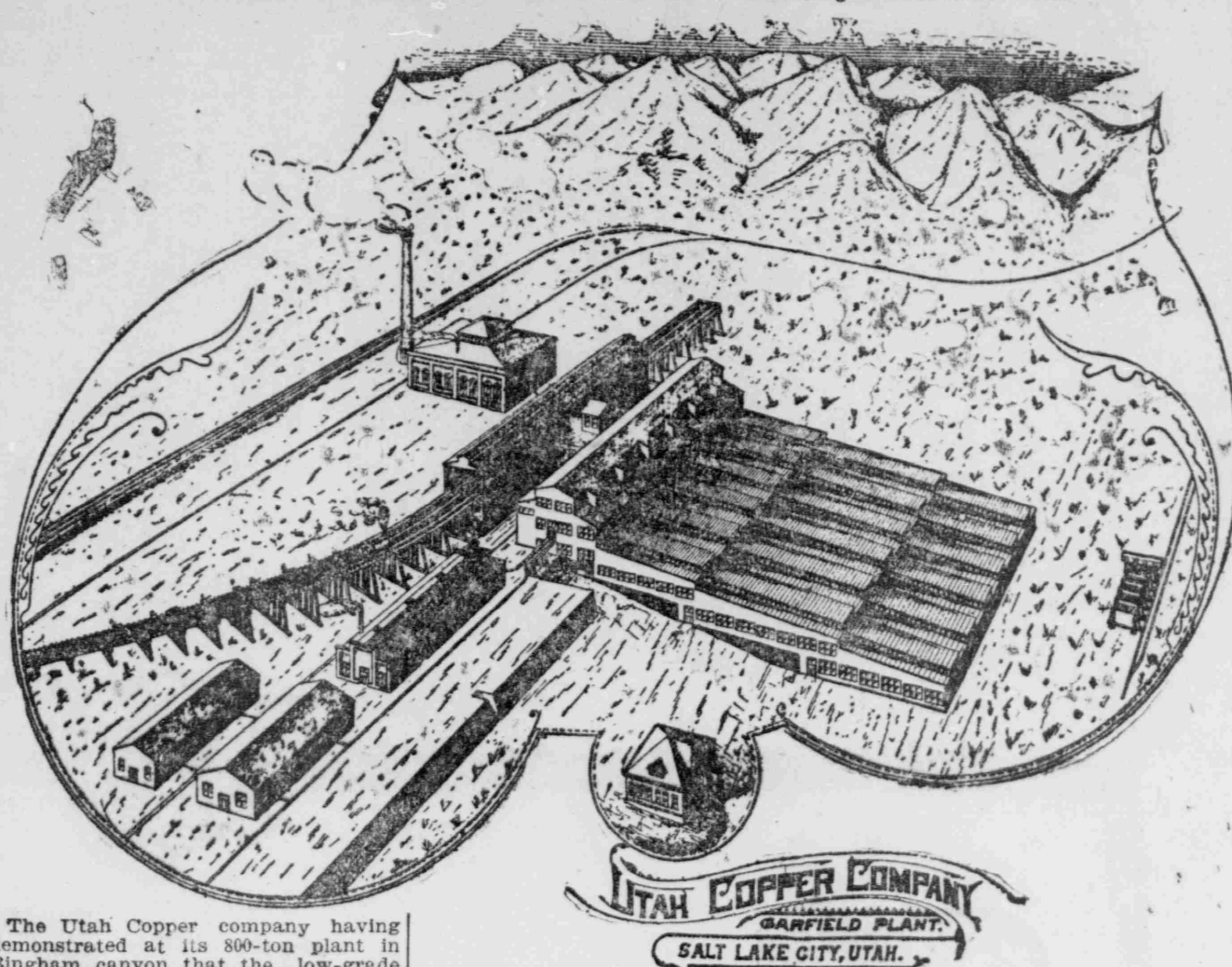
The extent of the great ore deposits in the Cactus mine and their values have often been told. The difficulties that prevented them from being worked has been generally known, and too well known to those who have attempted their extraction. That the mine is now being profitably operated the means employed are the points of greatest interest.

The Newhouse site is about ten miles northwest of Panguitch, the home of the famous Horn Silver mine. It is reached by the San Pedro, Los Angeles & Salt Lake railroad. The ore is brought from the mine by electric motor cars. It is then brought to the mill which has a daily capacity of 750 tons, a distance of over two miles by the Newhouse, Copper Gulch & Sevier Lake railway, an auxiliary concern to the mine and smelter corporations. The mine cars are run into a large tube which revolves and unloads them. The crushing is done at the mouth of the tunnel. The mill structure is of steel 400 by 100 feet provided with the best economic means for concentration. The equipment consists of rolls, elevators, jigs, tables, slimmers, settling tanks and classifiers. The power plant, 55 by 111 feet, is of brick. In it are an air compressor, two Westinghouse steam turbines of 500 horsepower each, which drive electric generators for furnishing light and power for the mine and mill.

In the town, aside from the residences and company offices, there is the Cactus, a boarding house for single men, and a club house for employees. The mine is operated through a 7,000-foot tunnel which cuts the main ore body at a depth of 600 feet. A year ago it was estimated that a sufficient amount of ore was blocked out to supply the mill with 700 tons a day for fifteen years, but since that time the ore reserve has been substantially increased. Lafayette Hanchett is general manager of the Newhouse staff and A. J. Bettles is metallurgist.

Utah Copper Company's Immense Enterprise

First 3,000 Ton Unit Smelter of the Four-Unit Plant Being Erected at Garfield.



The Utah Copper company having demonstrated at its 800-ton plant in Bingham canyon that the low-grade copper-bearing porphyries of that camp can be concentrated at a profit, has completed arrangements for prosecuting that enterprise on a scale almost beyond comprehension. To this end ground and water rights have been secured and contracts have been let, and

work already begun for the construction of a gigantic concentrator plant to handle 3,000 tons of ore daily. This plant will be completed the coming summer and it is only one of four units

of equal size the construction of which are to follow in rapid succession, so that when the enterprise is completed the aggregate concentrating daily capacity will ultimately be the enormous amount of 12,000 tons. The location of this plant is near the new town of Garfield, where the large smelter is being erected. Garfield is on the south shore of Salt Lake, on the west side of the Ogden range, and is connected with the mines at Bingham by a branch of the Rio Grande Western railroad which was begun and completed within the last six months. Garfield is also on the main line of the San Pedro, Los Angeles & Salt Lake railroad.

The main structure of these units will be 300x600 feet each. The equipment will be of the most modern and approved machinery in every department. The mine of the Utah Copper company comprises over 200 acres, which have been explored by from ten to twelve miles of underground workings, and tested by a system of drilling to great depth, and it has demonstrated that the tract contains many millions of tons of ore, that it is in fact almost inexhaustible. The entire body, a porphyry, carries better than 2 per cent copper, with some gold.

Arrangements are being made for working this body of ore by steam shovels and open cut methods which will reduce to a minimum the cost of production. D. C. Jackling is manager of this company, Frank Janney is mill superintendent and George O. Bradley engineer, in charge of the mill construction.

"What I would like to see all over the theatrical world is a school of practice for the acting of Shakespearean drama, without costumes and without scenery," said Henry Arthur Jones, the English dramatist, the other day. "Such a plan is now under way in England. My idea of a national theater is to reproduce a repertoire of old and modern plays with short runs. I wish I could influence the players here to read public plays. The idea serves to get an audience better acquainted with the stage production and incites an introduction to the drama. I got a glimpse of Maude Adams the other night. I have never seen her act before. She is the sweetest little actress I have ever seen. She is simplicity itself. England needs a few women on the stage like Maude Adams."

Daly-West One of Utah's Greatest Mines



Daly-West and Quincy.

The Daly-West mine at Park City, owner also of the Quincy mine, adjacent to the original holdings, is one of the great mines of Utah. It possesses a large acreage, in which exceedingly rich and large ore bodies exist. It has been a bread-winner for many years and continues to hand out \$108,000 in dividends every three months, and at the same time gradually increases the surplus in the treasury. The equipment of both mine and mill are extensive and complete, and under an aggressive management development work continues, and the silver-lead ores, with wonderful regularity respond to the calls on the mine.

By an arrangement with the Ontario company, made over a year ago, the Daly-West secured the use of the great Ontario drain tunnel and planned to deepen its workings to the 2,100-foot level, or 600 feet lower than the mine has yet been worked. But on account of a series of cave-ins along the tunnel early in the year, this work was forced to a standstill. Recently, however, the drain tunnel has been opened, the camp is being unwatered and the work of making connection with the Daly-West and making deeper explorations will be resumed. This improvement will both increase and cheapen the production of the mine.

The present officers of the company are: President, Jacob E. Bamberger; vice president, William H. Dickson; secretary, Josiah Barnett; treasurer, W. S. McCormick; who, with Albert Watts of Boston and Lazard Kahn of Hamilton, O., constitute the board of directors. Ernest Bamberger serves the company as general manager, F. W. Sherman is mill superintendent and Jasper A. McCusker, mine superintendent.

The officers of the company own practically all of its stock. H. G. Catrow is president, A. F. Bettles vice president, and Henry Catrow secretary-treasurer and managing director. Werner Zigler is general superintendent of the mine and mill. The directors follow: R. W. Burns, West Carrollton, Ohio; A. J. Bettles, Salt Lake; N. J. Catrow, Miamisburg, Ohio; H. G. Catrow, Miamisburg, Ohio; Henry Catrow, Salt Lake; J. C. Carns, Massillon, Ohio; J. H. Friend, Dayton, Ohio; E. L. Newell, Carrollton, Ohio; O. A. Tibbels, Salt Lake.

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SEE THE BIG AD IN MONDAY'S PAPERS

Columbus Con. Opens New Reserves



Columbus Con. Tunnel Building.

Columbus Con. Hotel.

Nowhere in Utah can there be found the ground for a better or more interesting mining story than is presented by the operations of the Columbus Consolidated Mining company at Alta. The camp is situated at the head of Little Cottonwood canyon and extends to the summit of the Wasatch range and is about twenty-eight miles from Salt Lake City. It is a historic place, the home of the Emma and Flagstaff and other almost equally famous mines, and when silver was high in the early seventies it is estimated that nearly \$40,000,000 was produced by that district. Later it suffered decadence almost to the extent of complete abandonment. Its revival has been due largely to the work of the Jacobson brothers, Tony Jacobson, manager and A. O. Jacobson, superintendent, of the Columbus mine. As mine prospectors some four years ago they secured an option on a deserted property. They worked this property, enlarged the holdings which now exceeds 200 acres, financed the enterprise and the result is that today the Columbus is a mine of the first magnitude with a complete equipment, and is in a position to respond with almost any tonnage that may be called for.

The equipment consists of a modern 200-ton concentrator plant for handling the low-grade ores, a poorer plant four miles down the canyon from which electricity is distributed for power, heat and light, and for the mine and mill.

A new three-story boarding house added to the former building for the same purpose forms in reality a first-class modern hotel capable of housing and feeding upward of 125 men. It is

substantially finished. It is provided with an office for the company and hotel, a reading room for the men. Hot and cold water are furnished on

each floor. There are a number of private bath rooms, and a large plunge bath pool is situated in the basement. Ore bins of 1,000 tons capacity have

Ohio Copper on Profitable Basis

The Ohio Copper company's properties at Bingham include a mine and mill in successful operation. The mine before falling into the hands of the present management, was known as the Columbia, and is centrally located on main Bingham canyon, in the vicinity of the holdings of the United States, Boston Con and Utah Copper companies.

The mill and company's office are adjacent to the Rio Grande Western railroad station.

The ore is brought from the mine to the mill over the Copper Belt railway. The capacity of the concentrator has been doubled within the first year and now 200 tons of ore pass through the crushers and over the tables every twenty-four hours. In addition to the concentrates shipments of crude ore are constantly made and some of this output is exceedingly high in copper, which is the chief metallic product of the mine. The material concentrated consists both of vein matter and porphyries which are of such uncommon occurrence in that camp.

The mine work is done through tunnels and winzes and the ore is loaded

directly on the railroad cars from the mine cars to the tunnel's mouth.

The development work of the Ohio company has been extensive during the past year, and the results have fully met the expectations of the management. On the 400-foot level a cross-cut has been run to the south a distance of 450 feet. Through the porphyry belt, and for a greater part of this distance, good copper values have been found. This work is being continued and will soon cut the What-Cheer vein which, on the upper levels, produces ore of exceedingly high grade.

The mill is a recent acquisition, and with its valuable water rights were obtained. The mine is now paying the company, which is a close corporation, profits to the amount of about \$10,000 a month. In the extent of its holdings, the size of its ore bodies and the values they carry, and the favorable location of both mine and mill, the Ohio bids well to size up with the largest mine of Greater Bingham. With every facility for handling the low-grade ores which are likely to be supplied at no distant time the profit-making capacity of the undertaking can doubtless be increased manifold.